

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017998**Date Inspected:** 04-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Tian lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 2

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07227.

**Ultrasonic Testing (UT)**

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Floor beam weld Components. Total number of welds UT Tested: 11 No's. The weld designations are review as follows:

1. FB3327-001-011,012,048,049,004,006

2. FB3343-001-102,104,080,255,024.

This QA Inspector Randomly observed the following work in progress:

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

Flux Cored Arc Welding (FCAW) of weld joint AP3032-001-730. Welder is identified as 066236. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-TC-P4-F.

FCAW of weld joint AP3032-001-544. Welder is identified as 066673. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-TC-P4-F.

FCAW of weld joint AP3032-001-660. Welder is identified as 069712. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2333-TC-P4-F.

FCAW of weld joint SA3448-001-001. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2231-B-U2-F-1.

Submerged Arc Welding of weld joint SA3450-001-001. Welder is identified as 045265. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2221-B-L2c-S-2.

FCAW of weld joint FB3321-001-040~043. Welder is identified as 207465. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-3.

ZPMC MT Technicians performing Magnetic Particle Testing for the welds located on Vertical plate VP3012A. Refer the attached photos for reference.

American Bridge /Fluor (AB/F) QA Inspector performing Visual Testing for the welds located on Floor beam FB3316A. Refer the attached photos for reference.

BAY- 3

FCAW Repair welding of weld joint SA3324-001-049. Welder is identified as 206623. ZPMC Quality Control (QC) is identified as Mr. Zhang yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-345-FCAW-2G (2F)-FCM-Repair. The repair welding was being performed as per the Welding Repair Report (WRR) No: B-WR16512. This weld was rejected by ZPMC UT Technicians and recorded on UT report No: B787-UT-17388.

FCAW of weld joint FB3286-001-390. Welder is identified as 067036. ZPMC Quality Control (QC) is identified as Mr. Zhan hai feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2232-TC-u4c-F.

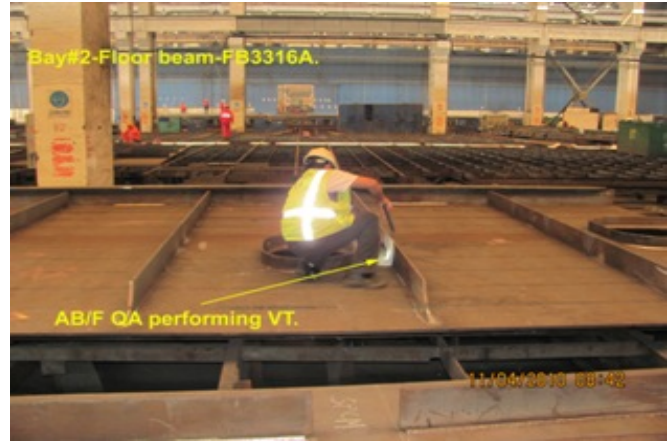
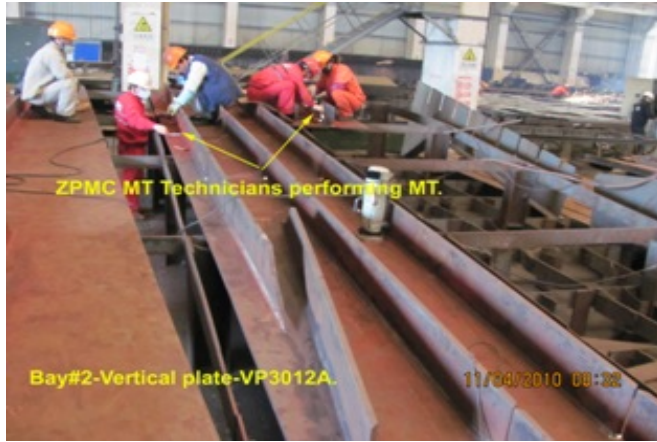
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



### Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

---